FINAL RECORD OF DECISION

SITE 10: Soil Operable Unit 6

at the

ALLEGANY BALLISTICS LABORATORY, ROCKET CENTER, WEST VIRGINIA

March 2007

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Abbreviations and Acronyms

ABL Allegany Ballistics Laboratory

ATK Tactical Systems Company LLC

BRAC Base Realignment and Closure

CERCLA Comprehensive Environmental Response, Compensation and Liability Act of

1980

COCs constituents of concern

COPCs constituents of potential concern CRP Community Relations Plan

CS confirmation study

DoD Department of Defense

EBS Environmental Baseline Survey ERA ecological risk assessment

ERN Environmental Restoration, Navy

ESADDI estimated safe and adequate daily dietary intake

FFA Federal Facilities Agreement FOST Finding of Suitability to Transfer

HHRA human health risk assessment

HQ Hazard Quotient

IAS Initial Assessment Study

IRP Installation Restoration Program

MCL Maximum Contaminant Level

msl mean sea level

NACIP Navy Assessment and Control of Installation Pollutants

Navy U.S. Navy

NCP National Oil and Hazardous Substances Pollution Contingency Plan

NPL National Priorities List

OU 6 Operable Unit 6

PCE tetrachloroethene

PRAP Proposed Remedial Action Plan

PWA Production Well A
PWC Production Well C

RAB Restoration Advisory Board RBCs risk-based concentrations

RDA Recommended Dietary Allowances RME reasonable maximum exposure

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ROD Record of Decision

SARA Superfund Amendments and Reauthorization Act of 1986

SMP Site Management Plan

TCE trichloroethene

TRC Technical Review Committee

TCA trichloroethane

USEPA U.S. Environmental Protection Agency

VOC volatile organic compound

WVDEP West Virginia Department of Environmental Protection

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Declaration

1.1 Site Name and Location

Site 10: Soil (Operable Unit 6) Allegany Ballistics Laboratory ("ABL"), Rocket Center, West Virginia National Superfund Database Identification Number: WV0170023691

1.2 Statement of Basis and Purpose

This decision document presents the Selected Remedy for Site 10 soil at ABL in Rocket Center, West Virginia ("the site"). Site 10 Soil is also known as Operable Unit 6 ("OU 6"). The final selected remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), as amended by the Superfund Amendments and Reauthorization Act of 1986 ("SARA"), and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"). This decision is based on the Administrative Record file for this site. The State of West Virginia concurs with the Selected Remedy.

1.3 Description of Selected Remedy

The U.S. Navy ("Navy"), as lead agency for Site 10, in conjunction with the U.S. Environmental Protection Agency ("USEPA") and the West Virginia Department of Environmental Protection ("WVDEP"), have determined that no further action is necessary for surface and subsurface soil at Site 10 (OU 6). This decision is based on the results of the human health and ecological risk assessments, which determined that there are no unacceptable current or future risks associated with the soil attributable to Site 10.

1.4 Statutory Determinations

No remedial action is necessary at Site 10 to ensure the protection of human health and the environment. The Selected Remedy for Site 10 (OU 6) will not result in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure; consequently, five-year reviews will not be required for this remedy.

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Ken Ellison, Director

Division of Waste Management

West Virginia Department of Environmental Protection

1.5 Authorizing Signatures
David W. Anderson Director Director
Installations and Equipment Office,
by direction of Commander Naval Sea Systems Command
James Burke, Director Hazardous Site Cleanup Division U.S. EPA, Region III
The State of West Virginia has reviewed this Record of Decision ("ROD") and the materials on which it is based and concurs with the selected remedy.
7 Cu Cllin 7/3/07

Date

Decision Summary

2.1 Site Name, Location, and Description

Site 10: Soil (OU 6)

Allegany Ballistics Laboratory, Rocket Center, West Virginia

National Superfund Database Identification Number: WV0170023691

Lead Agency: Department of the Navy

Source of investigation funds: Environmental Restoration, Navy ("ERN")

ABL is a research, development, and production facility located in Rocket Center, West Virginia, in the northern part of Mineral County. The facility is situated along a reach of the North Branch Potomac River, separating West Virginia and Maryland. The facility consists of two plants. Plant 1, owned by the Navy and operated by ATK Tactical Systems Company LLC ("ATK"), occupies approximately 1,577 acres, of which only about 400 acres are within the developed floodplain of the North Branch Potomac River. The remaining acreage is primarily forested and mountainous. Plant 2, a 57-acre facility adjacent to Plant 1, is owned and operated by ATK.

In June 1993, the USEPA proposed the Plant 1 portion of the ABL facility for inclusion on the National Priorities List ("NPL"). The Plant 1 portion of ABL was added to the NPL, as documented in the *Federal Register*, Volume 59, Number 27989, on May 31, 1994. Figure 2-1 shows the location of ABL (comprising Plant 1 and Plant 2) and the approximate locations of its CERCLA sites. Plant 2 is not listed on the NPL, nor does it contain any CERCLA sites.

Site 10 is located in the south-central portion of Plant 1 (Figure 2-2). The surface and subsurface soil at Site 10 (defined as OU 6) are addressed by this ROD.

2.2 Site History and Enforcement Activities

2.2.1 Site History

Site 10 is located in the south-central developed portion of the Plant 1. Site 10 was initially defined as "Site PWA" because contamination had been detected in Production Well A ("PWA"), which was used in the past to supply potable, boiler, and fire-fighting water to the plant. Because trichloroethene ("TCE") was detected in well PWA as early as 1980, its use as a water source was discontinued. Site PWA was renamed "Site 10" in 1995, to be consistent with the naming convention of other sites at ABL. Historical soil and groundwater data collected indicate that the source of contamination at Site 10 is a TCE still that operated in Building 157 from the late 1950s to the early 1960s.

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2.2.2 Previous Investigations

Site 10 was included in a number of environmental investigations conducted at ABL in the 1980s and 1990s and a supplemental soil investigation in June 2000. Investigations that included Site 10 soil are summarized below.

Confirmation Study (1984 through 1987)

The Navy initiated a Confirmation Study ("CS") in June 1984, which was completed in August 1987. The purpose of the CS was to either confirm or refute the existence of suspected contamination in the following areas: (1) sites 1 through 7 as identified during the Initial Assessment Study (ES&E, 1983); (2) Plant Production Wells in the developed portion of Plant 1 (specifically PWA and PWC, which are now part of Site 10); (3) springs; and (4) the North Branch Potomac River.

As a result of SARA, the Navy changed its Navy Assessment and Control of Installation Pollutants Program ("NACIP") terminology and scope under the Installation Restoration Program ("IRP") to follow the rules, regulations, guidelines, and criteria established by the USEPA for the Superfund program. Accordingly, the results of the CS are documented in an Interim Remedial Investigation ("RI") Report, which recommended further investigation for some sites, including Site PWA (Site 10), to identify the source of TCE and trichloroethane ("TCA") contamination in groundwater (Roy F. Weston, 1989).

Remedial Investigation (1992) and NPL Listing

Based upon the recommendations of the Interim RI and in accordance with the Navy's modified IRP policy, an RI was performed following USEPA RI/FS format under CERCLA (USEPA, 1988). The 1992 RI investigated soil around buildings in the vicinity of well PWA and southwest of Building 157, and confirmed that groundwater contamination in PWA likely originated from the former TCE still that was adjacent to Building 157 and recommended further investigation at Site 10 (CH2M HILL, 1996a).

In June 1993, the USEPA proposed the inclusion of the Plant 1 portion of the ABL facility on the NPL. On May 31, 1994, the Plant 1 portion of ABL was added to the NPL, as documented in the *Federal Register*, Volume 59, Number 27989.

Phase II Remedial Investigation (1994)

In 1994, a Phase II RI was conducted to further define the nature and extent of contamination at several ABL sites, including Site 10 (CH2M HILL, 1996b). During this investigation, baseline human health and ecological risk assessments were performed to evaluate potential risks posed by each site.

The investigations leading up to and including the Phase II RI determined that groundwater contamination existed at Site 10, identified the probable source of the contamination as the former TCE still that was adjacent to Building 157, and determined that contaminated groundwater posed a potential risk to future groundwater users. Therefore, to expedite implementation of a remedial action for Site 10 groundwater, Site 10 was separated into two Operable Units: OU 05, to address groundwater at Site 10, and OU 06, to address soil at Site 10. In addition, because the former TCE still was identified as the probable source of

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groundwater contamination, the RI concluded that additional soil delineation in the vicinity of the former TCE still was necessary.

Site 10 Supplemental Sampling/Risk Assessment (2001 and 2005)

Subsequent to the Phase II RI, it was determined that additional soil data were required in the vicinity of the former TCE still to adequately assess potential risks associated with exposure to soil at Site 10. Therefore, the Navy conducted a supplemental soil investigation in 2000 to supplement existing data (CH2M HILL, 2005).

Soil samples collected in the vicinity of Building 157 during the RI, Phase II RI, and the supplemental soil sampling activity were utilized to evaluate potential human health and ecological risks associated with current and potential future exposures to Site 10 soil.

No unacceptable human health or ecological risks were identified by the risk assessments. The report concluded that no action is necessary for Site 10 soil to be protective of human health and the environment (CH2M HILL, 2005).

2.2.3 CERCLA Enforcement Activities

No CERCLA enforcement actions have been taken at Site 10.

2.3 Community Participation

The Navy, as lead agency for Site 10, has met the public participation requirements of CERCLA Section 117(a) and the NCP at 40 CFR Section 300.430(f)(3) as follows:

- The notice of availability of the Proposed Remedial Action Plan ("PRAP") for Site 10 was published in the Cumberland Times-News and the Mineral Daily News-Tribune on Friday, July 21, 2006.
- A public comment period was held from July 24, 2006 through August 22, 2006.
- The Site 10 Administrative Record (i.e., the PRAP and supporting documents related to Site 10) was made available to the public at the following information repositories:

LaVale Public Library 815 National Highway LaVale, MD 21502

Fort Ashby Public Library Lincoln Street, IGA Plaza P.O. Box 74 Fort Ashby, WV 26719

 The Navy held a Public Meeting on August 8, 2006 to explain the PRAP and to address public comments. The meeting proceedings were transcribed by Word for Word Reporting of Swanton, Maryland. The meeting transcript is included as Appendix A to this ROD.

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Verbal questions and comments were received and answered during the Public Meeting.
 No written comments were received during the public comment period. Based on the comments received, the public did not object to proceeding with the selected remedy.

In addition to the CERCLA and NCP public participation requirements, the Navy and ABL have had a comprehensive public involvement program for over 10 years. Starting in 1993, a Technical Review Committee ("TRC") met on average twice a year to discuss issues related to investigative activities at ABL. The TRC comprised mostly governmental personnel; however, the meetings were open to the public and a few private citizens attended the meetings.

In early 1996, the Navy converted the TRC into a Restoration Advisory Board ("RAB") and 8 to 10 community representatives joined. The RAB is co-chaired by a community member and has held meetings, which are open to the public, approximately every 6 months since.

To assist the Navy in meeting the needs of the local community for information about, and participation in, the ongoing investigation and remedial processes at ABL, the Navy developed a Community Relations Plan ("CRP") in 1994 and updated the plan in 2001. The CRP identifies community concerns about the investigation and restoration of potentially contaminated sites at ABL and outlines community relations activities to be conducted during the ongoing and anticipated future restoration activities. Recommendations for future community relations activities are based on information about community concerns and the effectiveness of public participation activities to date, which was obtained during interviews with members of the local community.

2.4 Scope and Role of the Operable Unit or Response Action

Site 10 is one of the sites identified in the Federal Facilities Agreement ("FFA") for ABL. A list of all ABL sites can be found in the Site Management Plan ("SMP") for ABL (CH2M HILL, 2006). Over the last nine years, six RODs (including one interim ROD) have been signed for four sites at ABL in accordance with the priorities established in the SMP.

As of the date of this ROD, remedies have been implemented at four of the twelve top priority sites at ABL. The designation, media, and remedial action identified in the ROD for each of the four sites are listed below:

- Site 1 Groundwater, Surface Water, and Sediment ("OU 03"): site-wide groundwater extraction and treatment (ROD May 1997)
- Site 5 Landfill Contents and Surface Soil ("OU 01"): capping (ROD January 1997)
- Site 5 Groundwater, Surface Water, and Sediment ("OU 02"): installation of permeable reactive barrier, monitored natural attenuation, and long-term monitoring (ROD February 2006)
- Site 7 Former Beryllium Landfill ("OU 07"): landfill contents: removal in 1997 (NFA ROD September 2001)
- Site 10 Groundwater ("OU 05"): focused groundwater extraction and treatment (Interim ROD June 1998; Final ROD August 2005)

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This ROD addresses Site 10 soil (OU 06). A risk assessment was performed for Site 10 that determined that Site 10 soil presents no unacceptable risk to human health and the environment. Therefore, to allow unrestricted land use, the selected remedy requires no further action for Site 10 soil (OU 06).

2.5 Site Characteristics

2.5.1 Site Overview

Site 10, located in the south-central developed portion of Plant 1, was initially defined as Site PWA because contamination had been detected in PWA, which was used in the past to supply potable, boiler, and fire-fighting water to the plant. Because TCE was detected in PWA as early as 1980, its use as a water source was discontinued. "Site PWA" was renamed "Site 10" in 1995 to be consistent with the naming convention of other sites at ABL. Historical soil and groundwater data collected indicate that the source of contamination at Site 10 is the TCE still that operated adjacent to Building 157 from the late 1950s to the early 1960s.

The most significant physiographic feature in the vicinity of ABL is Knobly Mountain, located just south of Site 10 (Figure 2-1). The North Branch Potomac River is approximately 2,000 feet north of Site 10.

The predominant hydrologic feature at ABL is the North Branch Potomac River, located approximately 1,500 feet northeast of Site 10 and bordering the western and northern sides of the facility. The closest surface water feature in the vicinity of Site 10 is an intermittent drainage ditch, located approximately 100 feet north of the former TCE still, as depicted in Figure 2-2. However, the presence of Building 157 and the relatively flat topography in the vicinity of the former TCE still suggest that little or no runoff exists at Site 10.

The elevation of the North Branch Potomac River ranges from about 645 feet above mean sea level ("msl") at the eastern end of Plant 1 to about 655 feet above msl on the western border of ABL. The average river flow rate is estimated to be 886 cubic feet per second, as measured at the USGS Pinto gauging station.

Two predominant geologic layers exist in the subsurface at ABL: a shallow alluvial layer and a deeper bedrock layer. The RI and Phase II RI present detailed descriptions of the Site 10 geology and hydrogeology (CH2M HILL, 1996a and 1996b, respectively). A brief description of subsurface conditions at Site 10 is presented below.

The alluvium and fractured bedrock constitute the principal aquifers underlying Site 10. Although historic data indicate that variations in groundwater movement exist at Site 10, the natural groundwater movement direction in both the alluvial and bedrock aquifers is northeast, toward the North Branch Potomac River. However, pursuant to the ROD for Site 10 groundwater (OU 05), an extraction system is capturing the groundwater in both the alluvial and bedrock aquifers at Site 10 and that water is being treated by the groundwater treatment plant adjacent to Site 1 (Navy, 2005).

Groundwater flow in the bedrock aquifer is confined to bedding planes, fractures and solution channels at Plant 1. Local variations in the flow pattern may exist due to lithologic

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irregularities or to structural control (by fractures or joints) in the bedrock. Evidence exists that the bedrock and alluvial aquifers are hydraulically connected, with no observable confining unit separating them.

2.5.2 Sampling Strategy

Information about Site 10 soil has been gathered from the soil samples that have been collected at the site since the Interim RI (see the chronology of the investigation in Section 2.2.2). Additional sample information is presented in the risk assessment for Site 10 soil and Sites 2 and 3 (CH2M HILL, 2005). Section 2.5.4 provides a discussion of the sample results.

2.5.3 Source of Contamination

The potential source of contamination for Site 10 soil was the former TCE still in Building 157. Spills during the operation of the TCE still likely caused the release of contaminants.

2.5.4 Nature and Extent of Chemicals in Site 10 Soil

Data collected during the various investigations conducted (Section 2.2.2) defined constituent concentrations in soil such that the nature and extent of contamination and potential risks have been adequately evaluated. The nature and extent of chemicals in Site 10 soil is discussed below by media. The discussion below focuses on the constituents of potential concern ("COPCs") identified during the human health risk assessment ("HHRA") and the constituents of concern ("COCs") identified during the ecological risk assessment (ERA). It is important to note that the human health COPCs and ecological COCs are utilized in this section for descriptive purposes and do not reflect the risk assessment conclusions.

2.5.5 Surface Soil

Two volatile organic compounds ("VOCs") were detected in the surface soil: TCE and xylene (a mixture of m- and p-xylene). Both of these VOCs were estimated to be at concentrations below the laboratory quantitation limits. No organic constituents were identified as surface soil COPCs or COCs in the risk assessments.

Nineteen metals were detected in the surface soil samples. Five metals (aluminum, arsenic, iron, manganese, and vanadium) were identified as COPCs in surface soil during the HHRA (Section 2.7.1), based on comparison with USEPA Region III adjusted risk based concentrations ("RBCs") for residential soil. In addition, seven metals (aluminum, arsenic, chromium, iron, manganese, vanadium, and zinc) were identified as COCs during the ERA (Section 2.7.2). Sample locations as well as COPC/COC concentrations are shown in Figure 2-3.

2.5.6 Subsurface Soil

Three VOCs (m- and p-xylene, tetrachloroethene ("PCE"), and TCE) were detected in the subsurface soil at concentrations below residential RBCs. Thus, no organic constituents were identified as subsurface soil COPCs in the HHRA.

Twenty-one metals were detected in one or more subsurface soil samples. Five metals (aluminum, arsenic, iron, manganese, and vanadium) were identified as COPCs for

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combined surface and subsurface soil during the HHRA. Sample locations as well as COPC concentrations are shown in Figure 2-4. No ecological COCs were identified for the subsurface soil, because subsurface soil is not an ecologically significant habitat.

2.5.7 Background Soil Comparison

Statistical comparisons were performed to help determine if the concentrations of the soil metals COPCs and COCs at Site 10 are comparable to the background concentrations at the installation (CH2M HILL, 2003). Two statistical comparisons were performed: one comparison for subsurface COPCs and one for combined surface and subsurface COPCs in soil. During the HHRA, five COPCs were identified (aluminum, arsenic, iron, manganese, and vanadium) and were statistically compared to background concentrations of soil metals. In the ERA, four COCs (aluminum, chromium, vanadium, and zinc) were detected in the surface soil that were statistically above the background levels.

In summary, the results of the statistical comparison indicated that there is a statistically significant difference between facility background concentrations and Site 10 subsurface soil concentrations for each of the COPCs/COCs for Site 10 soil. However, these metals are not likely to be site related based upon site history because the only source of contamination at Site 10 is the former TCE still; the concentration of metals at Site 10 are most likely attributable to natural variations of metals in soil.

2.6 Current and Potential Future Site and Resource Uses

2.6.1 Current Site Land Uses

As noted in Section 2.1, Site 10 is located in the south-central developed portion of Plant 1. As such, the current use for the site and adjacent areas is industrial. The Navy anticipates that this area will remain under Navy ownership and will continue in the same capacity for the foreseeable future. Therefore, access to the site will continue to be restricted to facility workers and visitors by fencing and security personnel.

2.6.2 Potential Future Site Uses

Site 10 is anticipated to remain an industrial area in the future. Therefore, the currently exposed populations will remain the same for potential future site uses.

2.7 Summary of Site Risks

This section summarizes the results of the baseline HHRA and ERA for Site 10. A baseline risk assessment evaluates site data to determine potential risks to human health and/or the environment. The potential risks are evaluated for constituents in soil for each potential route of exposure.

No unacceptable risks to human health or to the environment were identified during the risk assessments prepared for Site 10 soil, as described below.

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2.7.1 Summary of Human Health Risk Assessment

A baseline HHRA was conducted to assess the potential human health risks from exposure to the COPCs detected in Site 10 soil (CH2M HILL, 2005). Site 10 soil constituent concentrations were evaluated in a baseline HHRA using current and potential future land use scenarios and conservative estimates of current and future human exposure to site contaminants.

As part of the Site 10 HHRA, a list of COPCs that may pose risks to human receptors defined for the site was developed and is presented in Table 2-1. As explained in Section 3 of this ROD, the COPC identification process included screening of site soil data against constituent concentrations that could pose a risk to human health. All of the COPCs identified during the evaluation of Site 10 soil were metals in the surface soil and the combined surface and subsurface soil.

"Exposure" refers to the potential contact of an individual with a constituent. A conceptual site model showing potential exposure pathways identified under current and potential future conditions at Site 10 is presented in Figure 2-5. This conceptual site model presents all potential routes of exposure; however, not all routes are complete exposure pathways. The exposure assessment identifies the complete pathways and routes by which an individual may be exposed to COPCs. It also estimates the magnitude, frequency, and duration of a potential exposure. The magnitude of exposure is determined by estimating the amount of a constituent that would be available at the exchange boundaries (i.e., the lungs, gastrointestinal tract, and skin) after an exposure. An HHRA quantifies constituent intakes and associated health risks only for complete exposure pathways.

The potential exposure pathways in Figure 2-5 were evaluated for the five elements established by the USEPA that are used to determine if each exposure pathway is potentially complete. The five elements are:

- A source (e.g., chemical residues in soil);
- A mechanism for release and migration of chemicals (e.g., leaching);
- An environmental transport medium (e.g., soil);
- A point or site of potential human contact (i.e., exposure point, such as contact with soil); and
- A route of intake (e.g., incidental ingestion of soil).

Current use of the site and adjacent areas is industrial. The Navy anticipates that this area will remain under its ownership and continue in the same capacity for the foreseeable future. Therefore, based on current land use, an industrial/site worker may be exposed to surface soil. Land access to the site is currently restricted to onsite workers by fences and security guards. Although unlikely due to security restrictions and the perimeter fencing around the facility, visitors and adolescent trespassers were conservatively evaluated as potentially exposed human receptors.

Site 10 is anticipated to remain an industrial area in the future, so current industrial users are expected to be future site users as well. Additionally, it was assumed that if any

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construction activities occur at Site 10, a future construction worker could be exposed to the combined surface and subsurface soil. Further, after any construction activities, a trespasser or visitor could be exposed to soil (combined surface and subsurface soil), assuming that subsurface soil may be placed on the surface during the construction activities.

Although unlikely, future residential exposure to soil (combined surface and subsurface soil) was evaluated in the Site 10 risk assessment as a conservative scenario. It was assumed that the subsurface soil may be placed on and combined with the surface soil if the site was converted for residential use or during future residential construction or excavation activities.

Human Health Risk Assessment Conclusions

The Site 10 soil baseline HHRA was conducted to evaluate the potential human health risks associated with exposure to site-related surface soil and combined surface and subsurface soil. Tables 2-2 and 2-3 present the cancer risks and hazard indices determined for Site 10, under a reasonable maximum exposure ("RME") and a central tendency ("CT") exposure, respectively. The HHRA concluded that no unacceptable potential human health risks exist for current site use.

The potential RME noncarcinogenic hazard index ("HI") for the future construction worker is slightly above 1, the acceptable upper limit pursuant to the NCP at 40 CFR 300.430(e)(2)(i)(A)(1), primarily due to the ingestion of iron. However, none of the individual constituents are estimated to cause adverse systemic effect, and there are no target organs with hazards above 1. Furthermore, the CT noncarcinogenic hazard is below the NCP target HI of 1.

Potential future exposure to combined surface and subsurface soil by a child resident may result in an HI of 1, primarily due to ingestion of iron and manganese. However, the CT noncarcinogenic hazard is below 1. Although the potential RME hazards are associated with naturally occurring constituents, the concentrations of these constituents (iron and manganese) detected in the Site 10 soil are greater than their respective concentrations in the background dataset (CH2M HILL, 2003). However, iron is an essential human nutrient, which complicates the derivation of a reference dose (USEPA, 1999). The reference dose is the toxicity factor used, along with the intake (amount of soil ingested and taken into the body through dermal contact), to calculate the HI. The estimated RME intake of iron via incidental ingestion of Site 10 soil (0.38 mg/kg-day) is within the recommended dietary allowance ("RDA") range of iron for children ages 6 months to 10 years (0.36 to 1.11 mg/kg-day) (National Academy of Sciences, 2003). Therefore, the concentration of iron in Site 10 soil is acceptable for ingestion by future child residents under conservative exposure scenarios.

Like iron, manganese is an essential human nutrient, responsible for activating several enzymes (IRIS, 2004). Exposure to manganese in the Site 10 combined surface and subsurface soil results in a hazard quotient ("HQ") above 1 for the future child resident. However, the recommended dietary intakes of manganese from the Food and Nutrition Board, Institute of Medicine, National Academies (National Academy of Sciences, 2004) for children 1 to 3 years of age and 4 to 8 years of age are 1.2 mg/day and 1.5 mg/day, respectively, which on average correlates to manganese intakes of 0.08 mg/kg-day and 0.1

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mg/kg-day, respectively. The manganese intake for child residents estimated in the risk assessment (0.014 mg/kg) is below these estimated safe and adequate daily dietary intake (ESADDI) doses. Therefore, the concentration of manganese in Site 10 soil is acceptable for ingestion by future child residents under conservative exposure scenarios.

Based on the results of the HHRA, no further action is needed for Site 10 soil to be protective of human health under industrial or residential use scenarios (i.e., unrestricted land use is applicable).

2.7.2 Ecological Risks

A baseline ERA was conducted to assess the potential ecological risks from exposure to the COCs detected in Site 10 soil (CH2M HILL, 2005). The ERA evaluated potential ecological risks for both upper trophic-level receptors (via food web exposures) and lower trophic-level receptors (via direct exposure). The ERA identified no unacceptable potential risks for any receptors. Information on the habitat features at the site and on the fate and transport of the constituents detected at the site were used to build a conceptual model, which is presented as Figure 2-6. Although seven metals (aluminum, arsenic, chromium, iron, manganese, vanadium, and zinc) were identified as ecological COCs based on comparison to surface soil screening values, only vanadium consistently exceeded background concentrations. Based upon the known site history, vanadium is not likely to be site-related and is likely to be attributable to natural variations in the soil. Furthermore, the relatively small size and the limited terrestrial habitat quality present at Site 10 limit potential ecological exposures.

Based on the results of the ERA, no further action is needed for Site 10 soil to be protective of ecological health.

2.7.3 Selected Remedy

No further action is necessary for soil at Site 10. This decision is based on the results of the human health and ecological risk assessments, which determined that there are no unacceptable current or future risks associated with soil at Site 10 for any land use.

2.8 Documentation of Significant Changes

The PRAP for ABL Site 10 soil was released for public comment on July 24, 2006. The PRAP recommended no further action as the Preferred Alternative for the site. No written comments were received during the public comment period; verbal comments were submitted and addressed only during the public meeting on August 8, 2006. The Navy, EPA, and WVDEP reviewed all verbal comments and determined that no significant changes to the proposed alternative, as originally identified in the PRAP, were necessary or appropriate.

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Table 2-1

Summary of Chemicals of Potential Concern for the HHRA - Site 10
Record of Decision -Site 10
Allegany Ballistics Laboratory
Rocket Center, West Virginia

Surface Soil	Soil*
Ingestion, Dermal, and Inhalation	Ingestion, Dermal, and Inhalation
of Airborne Particulates	of Airborne Particulates
Aluminum	Aluminum
Arsenic	Arsenic
Iron	Iron
Manganese	Manganese
Vanadium	Vanadium

^{*} Surface and subsurface soil combined.

Table 2-2

Summary of Reasonable Maximum Exposure Cancer Risks and Hazard Indices - Site 10 Record of Decision - Site 10 Allegany Ballistics Laboratory Rocket Center, West Virginia

				Chemicals with	Chemicals with Cancer	Chemicals with Cancer	Hazard	
Receptor	Media	Exposure Route	Cancer Risk	Cancer Risks >10 ⁴	Risks >10 ⁻⁵ and <10 ⁻⁴	Risks >10 ⁻⁶ and <10 ⁻⁵	Index	Chemicals with HI>1
Current/Future	Surface Soil	Ingestion	3.7E-06			Arsenic	1.9E-01	
ndustrial Worker		Dermal Contact	9.4E-07				1.9E-01	
ament and an extend that and apply discovered in		Inhalation	3.3E-09				7.2E-03	
		Total	4.6E-06				3.9E-01	
	All Media	Total	4.6E-06				3.9E-01	
Current/Future	Surface Soil	Ingestion	3.8E-07				5.4E-02	
Adolescent	a the second of the second second	Dermal Contact	8.4E-08				4.8E-02	
Trespasser/Visitor		Inhalation	4.3E-11				2.6E-04	
		Total	4.6E-07				1.0E-01	
	All Media	Total	4.6E-07				1.0E-01	
Future Adult Resident	Soil*	Ingestion	NA				3.3E-01	
didie Addit Nesidelli	3011	Dermal Contact	NA NA				1.2E-01	
		Inhalation	NA NA				2.0E-02	
		Total	NA NA				4.7E-01	
		Total	INA				4.7E-01	
	All Media	Total	NA				4.7E-01	
uture Child Resident	Soil*	Ingestion	NA				2.7E+00	Iron
	(Spanier)	Dermal Contact	NA				8.1E-01	
	1	Inhalation	NA				6.1E-02	
		Total	NA				3.6E+00	Iron, Manganese
	All Media	Total	NA				3.6E+00	
Future Child/Adult	Soil*	Ingestion	2.1E-05		Arsenic		NA	
Resident	10011	Dermal Contact	1.6E-06		Alsenic	Arsenic	NA	
Nosiderit	1	Inhalation	1.8E-08			Arsenic	NA	-
	1	Total	2.3E-05			-	NA	
		Total	2.02.00				, inc	
	All Media	Total	2.3E-05				NA	
uture Construction	Soil*	Ingestion	9.6E-07				1.0E+00	
Vorker		Dermal Contact	1.9E-08				7.4E-02	
	1	Inhalation	4.0E-10				1.9E-02	
		Total	9.8E-07				1.1E+00	
	All Media	Total	9.8E-07				1.1E+00	
Future Adolescent	Soil*	Ingestion	5.1E-07				6.6E-02	
Trespasser/Visitor	Joon	Dermal Contact	1.1E-07				6.6E-02	
i reapasser visitoi		Inhalation	5.8E-11				3.1E-04	1
		Total	6.3E-07				1.3E-01	
		Total	0.3E-07				1.3E-01	-
	All Media	Total	6.3E-07				1.3E-01	

^{*} Combined surface and subsurface soil

HI - Hazard Index

NA - Not Applicable

Table 2-3

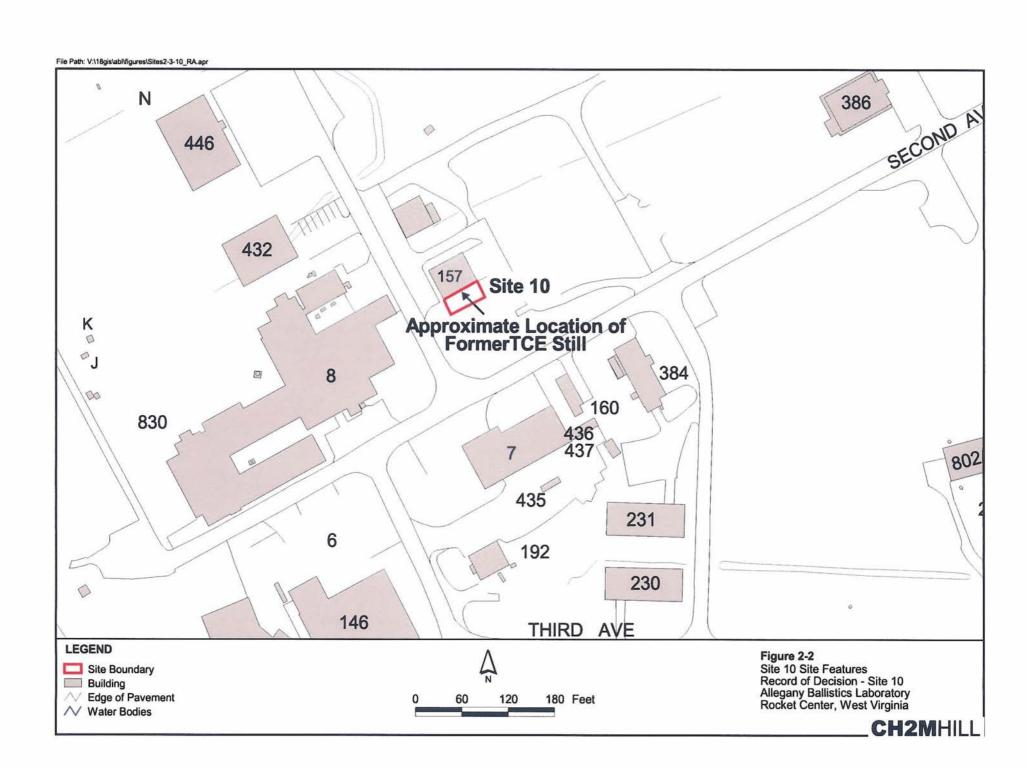
Summary of Central Tendency Cancer Risks and Hazard Indices - Site 10
Record of Decision - Site 10
Allegany Ballistics Laboratory
Rocket Center, West Virginia

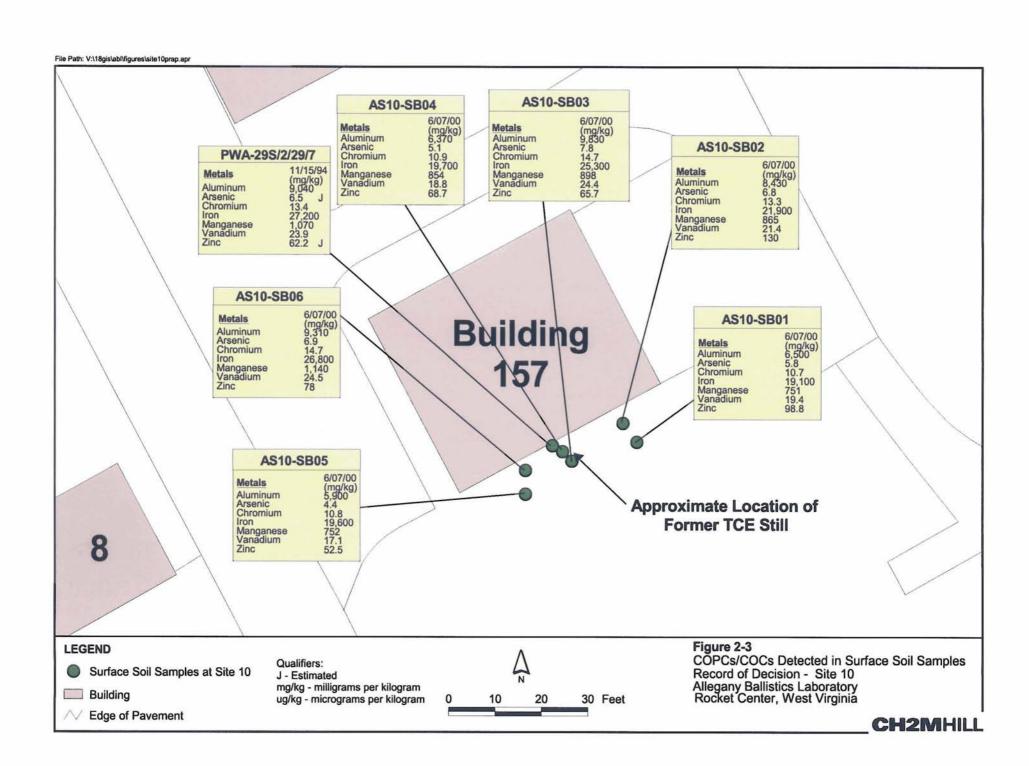
Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risks >10 ⁻⁴	Chemicals with Cancer Risks >10 ⁻⁵ and <10 ⁻⁴	Chemicals with Cancer Risks >10 ⁻⁶ and <10 ⁻⁵	Hazard Index	Chemicals with HI>1
uture Child Resident	Soil*	Ingestion	NA				2.7E-01	
	V	Dermal Contact	NA				1.3E-01	
		Inhalation	NA				NA	
		Total	NA				4.0E-01	
	All Media	Total	NA				4.0E-01	
uture Construction	Soil*	Ingestion	NA				7.7E-01	
Vorker	OTACHIV	Dermal Contact	NA				2.0E-02	
		Inhalation	NA				NA	
		Total	NA	-			7.9E-01	
	All Media	Total	NA				7.9E-01	

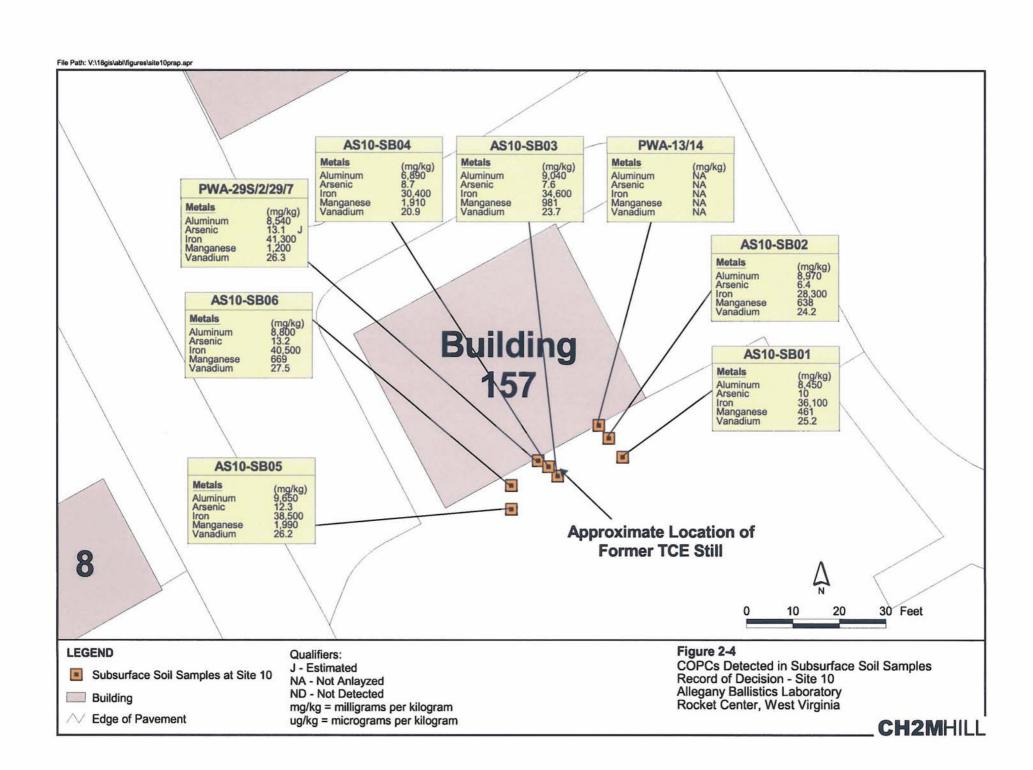
^{*} Combined surface and subsurface soil

HI - Hazard Index

NA - Not Applicable







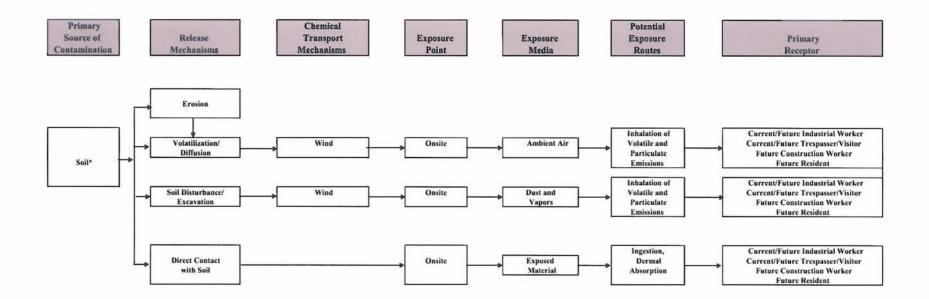
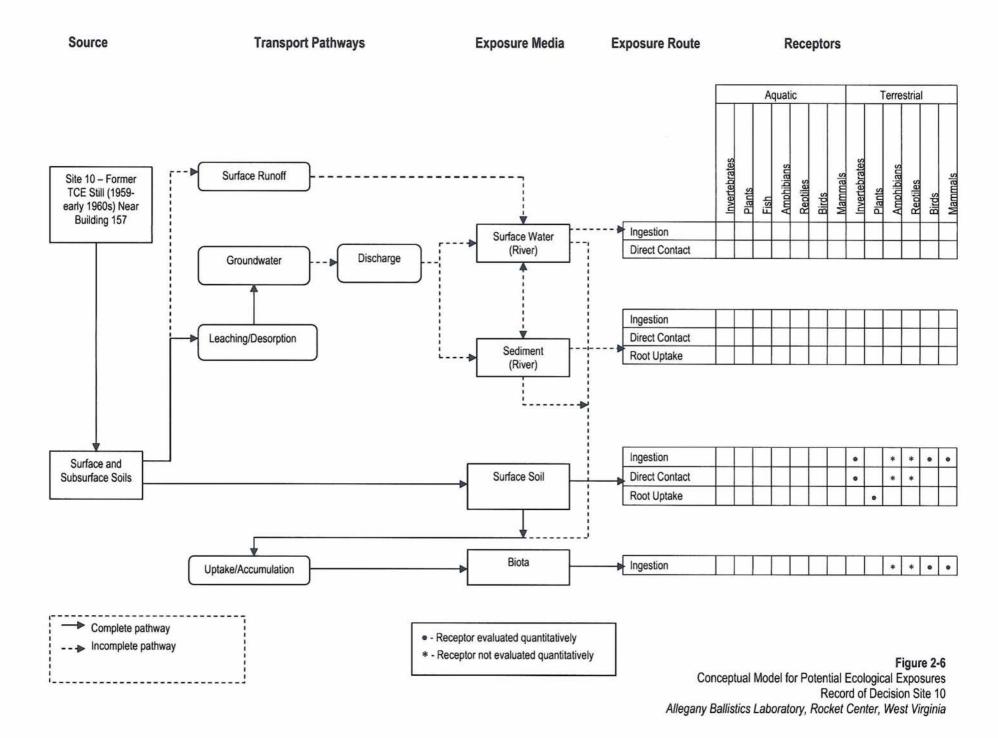


FIGURE 2-5
Conceptual Site Model for Potential Human Exposures
Record of Decision Site 10
Allegany Ballistics Laboratory, Rocket Center, West Virginia

Complete Pathway

^{*} Current scenarios are for exposure to surface soil, future scenarios are for exposure to combined surface and subsurface soil



Responsiveness Summary

The selected alternative for Site 10 is no further action. With the exception of the public meeting, no written or verbal comments, concerns, or questions were received by the Navy, EPA, or the WVDEP during the public comment period, which was held from July 24, 2006 through August 22, 2006. A public meeting was held on August 8, 2006 to present the PRAP for Site 10 and address any questions or comments on the PRAP and on the documents in the information repositories. Four questions were asked and responded to during the meeting. The limited number of comments and the content of those comments suggest that the public does not disapprove of the selected alternative. The transcript of the public meeting is part of the Administrative Record for this site and a copy is included as Appendix A of this ROD.

3.1 Stakeholder Issues and Lead Agency Responses

A summary of the questions addressed during the public meeting is presented below. Clarifying annotations to the questions and responses are shown in parentheses.

1. Although sites are evaluated on an individual basis, in the future if the Navy wanted to close the facility and deed the property over to the community or sell it, would a complete assessment of the facility as a whole be conducted?

Navy Response: A comprehensive assessment of the entire facility would be conducted if the Navy wanted to transfer the property in the future. Under the Base Realignment and Closure ("BRAC") Process, the Department of Defense ("DoD") must be able to document that a property made available is environmentally suitable for transfer by deed under Section 120 (h) of CERCLA. DoD must first prepare an Environmental Baseline Survey ("EBS"), which is based on all existing environmental information relating to the storage, release, treatment or disposal of hazardous substances or petroleum products on the property. In certain cases, additional data or sampling may be required.

In addition to presenting this information, the EBS would contain an analysis of the intended property use and would include an evaluation of the environmental suitability of the property for transfer by deed for the intended purpose, including the rationale for the determination. The EBS would also contain a listing of the specific recommended restrictions on use of the property, if any, to protect human health and the environment.

Following a review by the regulatory agencies and the public, DoD would sign a Finding of Suitability to Transfer ("FOST") and would proceed to convey the property by deed. Conditions would be included in the transfer deed to ensure that environmental investigation and remedial and oversight activities would not be disrupted, and could include limited use of the property.

2. Can you say a little bit more about the groundwater? I mean the soil is fine, but the groundwater is being remediated. Can you say exactly what that means and what's the

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basis for saying, we're done; we're not going to take any more water or soil? I mean, what's the end point and how's that attributed to sites when that's done?

Navy Response: An overview of the relationship between soil and groundwater at Site 10 was presented during the public meeting, which included a discussion of the ongoing groundwater treatment at Site 10. Site 10 was part of a number of investigations conducted at ABL in the 1980s and early 1990s and a supplemental soil investigation was conducted in 2000. Information gathered from these investigations indicated that limited volatile organic compound ("VOC") soil contamination exists in the vicinity of the former trichloroethene ("TCE") still, but that a VOC plume (specifically TCE) is present in the alluvial and bedrock aquifers at Site 10.

The Navy issued the PRAP for Site 10 groundwater in March 1998 and signed a ROD in August 1998. The selected remedy was an interim action and was intended to contain the most highly contaminated portion of the alluvial aquifer. This interim action was implemented in February 1999.

Additional evaluations determined that additional extraction wells were needed in the bedrock aquifer to contain groundwater contamination at Site 10. These changes were implemented in 2003, and this modified extraction/treatment system was selected as the final remedy for Site 10 groundwater in a ROD signed in 2005.

The results of the soil sampling at Site 10 in 2000 were evaluated for human health and ecological risks and were determined to present no unacceptable risk; consequently the Navy, EPA, and WVDEP determined that no further action for soil was warranted to protect human health and the environment.

Although it has been determined that the soil at Site 10 does not require any remedial action, the groundwater at Site 10 will continue to be contained and remediated through the extraction/treatment system currently in place. Monitoring of this system is being conducted on a regular basis, and a complete review of the remedy for Site 10 groundwater will take place every five years. Assuming that no additional technologies are implemented to expedite the clean-up of contaminated groundwater at Site 10, the current extraction/treatment system will continue to contain/remediate groundwater at Site 10 until the contamination has been reduced to levels below those promulgated by EPA, and until it is determined that an unacceptable risk from exposure to this groundwater no longer exists.

3. I assume that TCE is the only thing that is exceeding? (Is TCE the only contaminant in groundwater that exceeds regulatory criteria?)

Navy Response: In addition to TCE, a number of VOCs are regularly detected in both the alluvial and bedrock aquifers during the periodic long-term monitoring conducted at Site 10. However, the primary contaminant of concern and the most prevalent contaminant in the alluvial and bedrock aquifers at the site is TCE. In addition to TCE, methylene chloride, tetrachloroethane, and vinyl chloride also exceeded their respective Maximum Contaminant Levels (MCLs) in Site 10 groundwater.

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4. What was in the soil? Are we looking at metals or organics, or both?

Navy Response: Both organic and inorganic constituents were detected in soil samples collected from Site 10. Three VOCs (m-xylene, p-xylene and TCE) were detected in the surface soil at estimated concentrations below the laboratory quantitation limits. No organic constituents were identified as surface soil constituents of potential concern ("COPCs") for the human health risk assessment ("HHRA") or constituents of concern ("COCs") in the ecological risk assessment ("ERA").

Nineteen metals were detected in the surface soil samples. Five metals (aluminum, arsenic, iron, manganese, and vanadium) were identified as COPCs in surface soil during the HHRA based on comparison with EPA Region III's adjusted risk-based concentrations ("RBCs") for residential soil. In addition, seven metals (aluminum, arsenic, chromium, iron, manganese, vanadium, and zinc) were identified as COCs during the ERA.

In the subsurface soil, four VOCs (m-xylene, p- xylene, PCE, and TCE) were detected in the subsurface soil at concentrations below levels required to be identified as a COPC during the HHRA. No organic constituents were identified as subsurface soil COPCs in the risk assessments.

Twenty-one metals were detected in one or more subsurface soil samples. Five metals (aluminum, arsenic, iron, manganese, and vanadium) were identified as COPCs for combined surface and subsurface soil during the HHRA. No ecological COCs were identified for the subsurface soil because subsurface soil is not an ecologically significant habitat.

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Appendix A Public Meeting Transcript

1	
2	
3	PUBLIC MEETING
4	PROPOSED REMEDIAL ACTION PLAN
5	FOR ABL SITES 2, 3 & 10
6	
7	* * * * *
8	
9	TRANSCRIPT OF PROCEEDINGS
10	LaVale Public Library
11	815 National Highway
12	LaVale, Maryland 21502
13	August 8, 2006
14	
15	* * * * *
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		Page 2
1	PRESENT:	
2	John Aubert	
3	Joshua Barber Tom Bass	
4	Cassandra Brown Mark Callaghan	
5	Ray Downs Ginny Farris	
6	Bill Hudson Betsy Kagey	
7	Steve Martin John Waugaman	
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PROCEEDINGS

2 (The meeting was called to order at 6:30 p.m. 3 by Steve Martin.)

MR. MARTIN: I'm Steve Martin. I work for the Navy, and I represent the lead agency on this clean-up at Allegany Ballistics Lab. I work for the Naval Facilities Engineering Command Mid-Atlantic, and we're here today to solicit public input on some proposed remedial action plans for three of our sites at Allegany Ballistics Lab.

I'd like to briefly introduce the team members who meet regularly for this work. Let's see, I'll begin with -- we have Tom Bass, in uniform back there, works for the State of West Virginia, Department of Environmental Protection, and we have a regulator from Philadelphia, Josh Barger, Environmental Protection Agency out of Region 3, and then we have John Aubert, who represents NAFSEA directly. His office is in California. He's sitting in the back next to Tom.

And then the private company that does most of our work is represented well tonight. We have Mark Callaghan, who will be going through the three

- 1 presentations on the proposed remedial action plans.
- 2 Mark's from the Herndon Office of CH2M Hill, as well as
- 3 Cassandra Brown in the front and Ginny Farris in the
- 4 back. And then we also have another guest from EPA,
- 5 Bill Hudson, as well, so without any further comments,
- 6 let's begin, Mark.
- 7 MR. CALLAGHAN: Okay. Can everybody hear me
- 8 okay from here? Normally, I'd stand up, but I'm going
- 9 to remain here.
- 10 So this is the Proposed Remedial Action Plan
- 11 | for Site 2 at Allegany Ballistics. Presentation topic
- 12 tonight, begin the PRAP for Site 2 Soil and Groundwater;
- 13 | its presentation followed by a Q&A session.
- 14 | Why do we hold a public meeting? Well, it's
- 15 | part of the Navy's community relations program, and we
- 16 do that to keep the public informed, provide an open
- 17 forum for the public to ask questions, and it's also
- 18 | a component of CERCLA, which is the Comprehensive
- 19 Environmental Response, Compensation and Liability
- 20 Act, which the majority of the work of ABL is being
- 21 conducted under.
- Objectives of the Proposed Remedial Action

Plan: We document past investigations, we summarize
the site risk, we describe the preferred alternative,
and this is the opportunity for the public to provide
input on that preferred alternative.

Here's ABL itself. You can see the big site here, this over here. You can see my pointer -- my little laser pointer ran out, so this is Site 2 itself, right over here.

MS. KAGEY: Would you walk through the site for the one person here who hasn't been here before?

MR. CALLAGHAN: Yeah, this is Plant 1. This is the developed portion of Plant 1 at least. In order, the sites here, Site 1, Site 2, Site 3, Site 4B, Site 10, Site 11, and Site 12 over here. Site 5 is closed landfill vats. That's actually further south in the undeveloped portion of Plant 1.

Okay, Site 2 history. Site 2 was a burning ground utilized from '42 to '49. Aerial photos indicated that there was a burn path approximately 45 feet in diameter southeast of the current location of Building 361, and it's suspected that the burning of energetic material at this pad caused a release of

- 1 | contaminants into the environment. But currently the
- 2 | site is -- there's nothing there. It's an open field.
- 3 It's periodically mowed. There's no visual evidence of
- 4 | contamination or the former burn pad.
- 5 A close-up of the site here you can see.
- 6 | That's it itself, right next to the river here, and
- 7 this is the Building 361 that I was just alluding to.
- 8 I'm just going to whip through these site
- 9 investigations here. We did an Initial Assessment
- 10 | Study from 1983 through 1987, which concluded that
- 11 | Site 2 did not pose an immediate threat; however a
- 12 | Confirmation Study was conducted to assess potential
- 13 contamination.
- In 1992, the facility was listed on the
- 15 National Priorities List, sometimes known as Superfund,
- 16 and a remedial investigation was conducted that showed
- 17 | low concentrations of volatile organic compounds and
- 18 metals in the soil and groundwater.
- This continued on in 1994 with a Phase II RI,
- 20 which indicated that the burn pad was not likely a
- 21 | source of VOC groundwater contamination.
- 22 And then in 2001, we did some supplemental

sampling, where we collected additional soil data for risk assessments.

Continuing on in the investigations, the Risk Assessment Report, like I said, we collected soil samples during numerous investigations. Groundwater data from monitoring wells was also evaluated to determinate an extent.

An investigation of groundwater beneath

Site 2 determined that low levels of contamination

were attributable to releases from Site 10, which is

upgradient of Site 2, and there's currently a

remediation action to contain and treat the groundwater

at Site 10.

A Human Health Risk Assessment was conducted. We evaluated potential receptors, current and future industrial workers, current and future adolescent trespassers and visitors to the site, future adult and child residents of the site -- it's a very conservative scenario -- and also, future construction workers.

This all indicated that there was no unacceptable risk under current or future conditions and that the results of the Human Health Risk

Assessment indicate that no remedial action is
necessary at Site 2 to be protective of human health.

We also wanted to look after the bugs and bunnies, so we did an Ecological Risk Assessment. We evaluated upper-trophic-level receptors, via food web exposures, and lower-trophic-level receptors. Upper-trophic-level are generally things like badgers, shrews, eagles, that sort of stuff. Lower-trophic, we're talking more about benthic organisms, worms, things like that. And that indicated that there was no unacceptable risk to any ecological receptors.

So again, the results of the ERA indicate no remedial action is necessary to be protective of ecological health.

So, some of the important questions here, is there a risk to current or future ABL tenants? There is no -- there's no risk at all. No unacceptable risk from exposure to soil. Groundwater's not a potable source, so nobody's going to be drinking that. That's not anticipated to be so in the future, and as I alluded to before, groundwater contamination levels at Site 2 are very low, and there's a groundwater

- 1 | containment and treatment remedy in place at Site 10.
- 2 | So any residual contaminant levels at Site 2 are
- 3 | anticipated to decline naturally over time.
- 4 So is action needed for soil and groundwater?
- 5 The short answer is no. No further action is needed
- 6 | for Site 2 soil. The soil at the site does not pose a
- 7 | risk to humans, plants, animals, under any scenario,
- 8 and the soil does not represent a continuing source of
- 9 groundwater contamination.
- 10 Again, no further action is needed for Site 2
- 11 groundwater. It's not a potable source, and as I again
- 12 allude to, residual contamination is attributed to Site
- 13 10.
- So what is being proposed here tonight? No
- 15 further action is the preferred alternative for soil
- 16 and groundwater at Site 2. Navy, USEPA, and West
- 17 | Virginia Department of Environmental Protection have
- 18 determined that there is no unacceptable risk at the
- 19 | site under any current or future land use exposure
- 20 scenarios.
- 21 Community participation, why are we holding
- 22 | this public meeting here? It's part of the Preferred

- 1 Alternative Selection Process. That's why we do this.
- 2 Your comments tonight and agency responses will be
- 3 included in the record of decision, which is the
- 4 document that is going to follow this Proposed Remedial
- 5 Action Plan.
- 6 So, the Public Participation Process, July
- 7 24th through August 22nd, that's the public comment
- 8 period. Obviously, we're holding a public meeting
- 9 tonight. Any additional information that you need is
- 10 in the Proposed Remedial Action Plan. There are copies
- 11 of it over on the table there if you'd like to grab a
- 12 copy, and also, there are historical documents
- 13 available at the administrative record repositories.
- MS. KAGEY: Which is here.
- MR. CALLAGHAN: Which is here.
- MS. KAGEY: At the LaVale Public Library.
- MR. CALLAGHAN: Okay, so public comments?
- 18 | Verbal comments will be accepted tonight. Written
- 19 comments must be postmarked by August 22nd, and they
- 20 can be either mailed by U.S. postal mail to Robin
- 21 Willis at the address you see there, or they can be
- 22 e-mailed to Robin Willis at that address right there.

- 1 Also in the presentation and in the public -- in the
- 2 Proposed Remedial Action Plan, you will see the same
- 3 | contact information.
- 4 Administrative record repositories, right
- 5 here, LaVale Public Library, and also in the Fort Ashby
- 6 Public Library in Fort Ashby, West Virginia.
- 7 Does anybody have --
- 8 MR. MARTIN: Can you go back to that one slide
- 9 and just -- if anyone wanted to find that, what do we
- 10 ask for?
- MR. CALLAGHAN: If anybody wanted to find
- 12 historical records, there are CDs in both libraries
- 13 | with the Site 2, 3, and 10 Risk Assessment Report and
- 14 a copy of the Proposed Remedial Plans on those CDs.
- 15 If anybody wanted additional information as to old
- 16 historical documents or documents related to other
- 17 | sites, point of contact would be Ms. Robin Willis at
- 18 NAVFAC. You could call her; you could send her an
- 19 e-mail; you could send her a letter and request
- 20 documents.
- Does anybody have any questions or comments
- 22 on the Proposed Remedial Action Plan for Site 2?

MR. DOWNS: Just a question as to the -- for information. Unacceptable risk, that is based on EPA

MR. CALLAGHAN: Yes, that is -- unacceptable, did you say, what is no unacceptable risk?

MR. DOWNS: No, no, I mean what -- how is unacceptable risk defined? I mean, I assume that there are concentrations in EPA that define what is acceptable or unacceptable.

MR. CALLAGHAN: Yes. There are a few ways we do that Human Health Risk Assessment.

One is we look at reasonable maximum exposure, and that is where we take the soil and groundwater data together and, to not go into too much detail, we crunch the numbers with EPA guidance, using established toxicological data and cancer slope factors, etc. and we put all that data into a model which assumes the worst possible scenario, which is that's the reasonable maximum exposure. That would say that you are exposed to the worst or the highest level of contamination at a certain site. Everywhere you go, you're exposed to that, and if you exceed a hazard index of unity, which

1 is one for non-carcinogens, that would be an unacceptable risk. Or if you have --

MR. DOWNS: So this is a rolled up number?

4 MR. CALLAGHAN: It is a rolled up number.

5 Basically there are -- what you do is you calculate

6 hazard cautions for each individual chemical.

MR. DOWNS: What is the major chemical issue?

MR. CALLAGHAN: At this site would be low-

9 level VOCs and metals, so low levels of TCE, low levels

10 of arsenic, low levels of manganese, magnesium, iron,

11 | that sort of stuff -- common compounds that you find

12 in soil, generally.

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So all of those chemicals will be calculated together to create hazard cautions, and they will be rolled up into — well, with the exception of carcinogens. Carcinogens use something called incremental lifetime cancer risk, where you look at the cancer slopes, and that comes out as a value of one times ten to the minus something, and an unacceptable risk would be something

20 that exceeds one times ten to the minus four. And at

21 this site, we have no unacceptable risks.

There is another phase that you can go on to

1 after that, which is a much more realistic phase. 2 called a Central Tendency Exposure Scenario, and that 3 is where you take the average across the site, because 4 you assume that somebody who would be exposed to 5 contaminant level at the site would not be exposed to 6 the maximum contamination level everywhere they go. 7 They're not going to permanently stay at that spot, so you take an average of all the contamination of the 9 site, as though somebody was walking across the site, 10 and you do exactly the same calculations, and that 11 would be a more reasonable scenario. That's how it's 12 done. 13 MR. DOWNS: Makes sense. 14 MR. CALLAGHAN: Any more questions?

Okay, with that, I'll conclude the Proposed

will move on to the Proposed Remedial Action Plan

18 presentation for Site 3.

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Again, the Proposed Remedial Action Plan presentation for Site 3 soil and groundwater, the presentation is a very similar format, followed by a Q&A session.

Remedial Action Plan presentation for Site 2, and we

I've already gone over this, so I won't delay too long on it, but it's part of the Navy community relations program, and it's a component of CERCLA.

That's why we hold these public meetings.

The objectives of the PRAP, as you can see, past investigations, summarizing risk, describing the preferred alternative, and again, this opportunity to provide input.

Again the map of the facility, Site 3 is located over here, as you can see, in the southwest quadrant of the developed portion of the plant -- sorry, southeast quadrant of the developed portion of the Plant 1.

Let me run through the history. It was a burning grounds utilized from 1950 to '58. When it was active, it was 40 feet by 200 feet, and approximately 200 pounds of waste were burned daily at the site.

Again, this burning of waste was suspected to have caused a release of contaminants.

Currently, the site consists of Building 362, which was constructed to cover most of the former burning ground, and there's grassy area around the

- outside of the building, and there's no visual evidence of the burn pad.
- This is a close-up of Site 3. As you can see, this building was constructed over a majority of it.

 The rest of this is low grassy area.
- Previous investigations, the IAS and the CS
 from 1983 to 1987 concluded that it did not pose an
 immediate threat; however, a CS was conducted to assess

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contamination.

- Again in 1992, the NPL listing for ABL and the RI, which recommended further investigation of Site 3 based upon detections of SVOCs, TCE, and several metals in soil and some low concentrations of VOCs in groundwater.
- Phase II RI, 1994, supported the RI findings that low levels of VOCs in groundwater existed at Site 3. And again in 2001, additional soil data were required to adequately assess potential risks.
- This was again all rolled up into the same
 Risk Assessment Report. The groundwater data from
 monitoring wells located around the site were used to
 evaluate human health as well, as well as the

supplemental soil sampling, and this report indicated no unacceptable human health or ecological risks.

Again, the same receptors as we've had previously in current and future industrial workers, adolescent trespassers, future adult and child residents, and construction workers. Looking at all these potential receptors indicated there was no unacceptable risk under current or future conditions, and the results of the HHRA indicated that no remedial action is necessary to be protective of human health.

Ecological Risk Assessment was also performed. Upper-trophic-level receptors and lower-trophic-level receptors were evaluated, and the report concluded that there was no unacceptable risk under current or future conditions and that no remedial action is necessary to be protective of ecological health.

So again, we throw out this question, is there a risk to current or future ABL tenants? And the answer is no, there is no risk, no unacceptable risk from exposure to soil, and there's no unacceptable risk for future potable groundwater use at Site 3.

Is there a risk to the surrounding community?

- 1 No, there's no risk to the surrounding community.
- 2 There are no unacceptable risks for potable groundwater
- 3 | use at Site 3.
- So do we need to do anything? Do we need to
- 5 do anything further? No. No further action for Site 3
- 6 | soil, as I've alluded to. The site does not pose a
- 7 | risk to humans, plants, animals under any land-use
- 8 | scenario, and it does not represent a source of
- 9 groundwater contamination.
- 10 No further action for Site 3 groundwater, no
- 11 unacceptable risk for potable groundwater use, and
- 12 | there are no off-site groundwater residential receptors
- 13 that are downgradient of Site 3.
- What is being proposed here tonight? Again,
- 15 | no further action is the preferred alternative for both
- 16 | soil and groundwater, and the Navy, the USEPA, and West
- 17 | Virginia Department of Environmental Protection have
- 18 determined that the site does not pose an unacceptable
- 19 risk to human health or the environment under current
- 20 or future land use scenarios.
- 21 Community participation, again, is part of the
- 22 preferred alternative selection, and any substantive

1 comments or responses, and they'll be included in the 2 record of decision.

The public comment period is the same. The public meeting is obviously tonight. Again, additional information can be found in the Proposed Remedial Action Plan, and those documents are available at the administrative record repository. Public comments tonight or written and as to public contact, you can see that. The administrative record repositories remain the same, LaVale and Fort Ashby.

Does anybody have any questions or comments on Site 3? Betsy?

MS. KAGEY: On the Site 3, you talked about no remedial action for potable water. Did you do the same thing at Site 2? Was there a question of potable water at Site 2? I'm sorry --

MR. CALLAGHAN: It's not a problem. Let me refresh my memory.

MS. KAGEY: Somehow it went by me, and when you did it, it was like one of the last lines. Okay. Groundwater is not used as a potable source --

MR. CALLAGHAN: And is not anticipated to be

1 in the future.

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MS. KAGEY: Okay, so there wasn't anything about future use of potable water at Site 2?

MR. CALLAGHAN: Right. Now the thing with

Site 2 is that, as you can see on that third bullet

there, there is groundwater contamination at Site 2.

7 MS. KAGEY: And it's being treated at the 8 treatment plant?

MR. CALLAGHAN: Exactly.

MS. KAGEY: Okay.

MR. CALLAGHAN: It is not associated with Site 2 itself. The contamination under Site 2 is associated with contamination from Site 10, and that site itself has already gone through a proposed plan, record of decision, and there's a groundwater extraction treatment system in place.

MS. KAGEY: Okay.

MR. CALLAGHAN: So any residual contamination is being treated, and as we say here, any residual contamination of Site 2 is anticipated to decline naturally over time. So that's why we feel that, using the risk management's decision, no further action is

- necessary because it will decline, and the source of contamination is actually being treated and captured.
- MS. KAGEY: I have a question that's going to drive you nuts.
- 5 MR. CALLAGHAN: That's okay.
- MS. KAGEY: I understand all the different
 sites, and I've been around this particular site for
 quite a while. Is there any future look at the entire
 site as one, when you're dealing with things like
 groundwater and potential -- I mean, I know there's a
 lot of treatment of groundwater. Site 1, I think it
 is --
- MR. CALLAGHAN: You mean --
- MS. KAGEY: I mean, but when you take a look
 at Site 2 and you see the proximity of the site, you
 know --
- 17 MR. CALLAGHAN: Right.
- MS. KAGEY: I know there are sort of hotspots
 that came up when you started, when you've done all
 the testing, and I know there's been a lot of testing
 there, but is there any value, maybe, to look at the
 entire site as all -- I mean the entire area --

- MR. CALLAGHAN: The entire facility?
- MS. KAGEY: Facilities.
- 3 MR. CALLAGHAN: Okay.
- 4 MS. KAGEY: And looking and sort of doing
- 5 risk assessment for the entire facility, based on the
- 6 individual site?
- 7 MR. AUBERT: You've got two different owners
- 8 there. Site -- Plant 1 is owned by the Navy.
- 9 MS. KAGEY: Uh-huh.
- 10 MR. AUBERT: Plant 2 is owned by ABL or ATK.
- MS. KAGEY: Right.
- MR. AUBERT: And, you know, in a scenario,
- 13 they can look at the whole thing if they want to do
- 14 that, but the clean-up of the sites are separate, and
- 15 | John's going to talk later on Plant 2. He has to have
- 16 some time --
- MS. KAGEY: But did you understand the
- 18 question?
- MR. AUBERT: What?
- 20 MS. KAGEY: Do you understand the question?
- 21 MR. AUBERT: Yeah, I understand the question.
- 22 Is contaminant from Plant 2 coming into Plant 1 is what

1 your concern may be?

MS. KAGEY: No, no.

MR. CALLAGHAN: You're saying does anybody
look, comprehensively, at the whole site to evaluate
the risk.

MS. KAGEY: Right. Okay, if you were to sell the entire site, okay, for future use. I mean it's not going there at this point in time. Okay, the Navy owns all the land underneath all the buildings there?

MR. AUBERT: Yes.

MS. KAGEY: Okay, so the building that's owned by ABL or (inaudible) is a building; you own the property -- the Navy owns the property, the whole property underneath it. So future use, meaning if they close down the (inaudible) and everything closed and they went and the Navy wanted to deed the property over to the community or wanted to sell the property as a whole, at that point in time, would they do a complete assessment of this property?

MR. AUBERT: We wouldn't do Plant 2, but Plant 1 would have a -- you would have an assessment of the whole site of Plant 1 when they go to close it to make

- sure that it's environmentally clean and safe to sell it, yes.
- 3 MS. KAGEY: Right.
- 4 MR. CALLAGHAN: I believe there's a document,
- 5 and I may be misspeaking here, but I think it's called
- 6 FAST, which is something like Finding of Suitability
- 7 for Transfer.
- 8 MS. KAGEY: Finding of suitability, right,
- 9 okay, which deals with the entire site then.
- 10 MR. CALLAGHAN: Which deals with the entire
- 11 | site. Now, all these individual sites are cleaned up
- 12 and evaluated separately.
- MS. KAGEY: And all of this information would
- 14 go into that --
- MR. CALLAGHAN: Exactly.
- MS. KAGEY: -- if you got to the point where
- 17 there's going to be a transfer.
- 18 MR. BARBER: Well, specifically, the FAST
- 19 | could cover the entire site that's -- it's a DOD
- 20 specific document when it was created, but it can also
- 21 be used for parcels. It was created for the BRAC
- 22 Program, which was for all the bases which are closed

1 or realigned.

There's another document that can also be created or referenced, and it's called an ECOP, which is Environment Condition of Property, which is another type of assessment, which basically is used to summarize all the other information that has been pulled together on the site as well. It's something else that can be used.

9 MS. KAGEY: Okay.

MR. BARBER: So it can be done.

MR. CALLAGHAN: Does that answer your

12 question?

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MS. FARRIS: There was a facility-wide baseline survey done there, I think.

MR. CALLAGHAN: Are there any more questions on the Proposed Remedial Action Plan for Site 3? No?

That closes the presentation for Site 3, and we'll move on to the Proposed Remedial Action Plan for Site 10.

Presentation topic, the PRAP for Site 10 soil, followed by a question and answer session.

Why do we hold a public meeting? I've

- 1 explained before, part of the Navy's community
- 2 | relations program, and it's a component of CERCLA. We
- 3 | want to keep the public informed and provide that open
- 4 | forum to ask questions and submit comments.
- 5 Again the PRAP, we document past
- 6 investigations, summarize site risks, and we describe
- 7 | the preferred alternative, and we solicit your
- 8 comments.
- 9 Site 10 is actually over here. Here is Site
- 10 | 10 itself. Moving on to the history of Site 10. It's
- 11 | located in the south-central portion of Plant 1. A
- 12 production well was located at Site 10. That was used
- 13 | in the past to supply potable, boiler, and firefighting
- 14 | water to the plant. And that Production Well A was
- 15 discontinued in 1980 because TCE was detected in the
- 16 | well.
- 17 Historical soil and groundwater data were
- 18 | collected, and they indicated that the source of
- 19 | contamination was the Building 157 still, which was a
- 20 TCE still at the building.
- Here we go. Here is Site 10. So this was the
- 22 approximate location of the former TCE still, a much

1 larger groundwater plume, which is currently being

2 treated under the (inaudible). And as I said, this

3 PRAP is purely for Site 10 soil only. A remedy is

4 already in place for the groundwater at Site 10.

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groundwater.

Previous investigations, confirmation study
from '84 through '87 was used to confirm or refute
suspected contamination, and this recommended further
investigation of Site 10 to identify the source of TCA
and TCA -- sorry, TCE and TCA contamination in

A remedial investigation and NPL listing, obviously in 1992, and this RI identified the former TCE still at Building 157 as the source of contamination in that PWA well, and it recommended further investigation of Site 10.

So in 1994, the Navy did a Phase II remedial investigation, and that determined contaminated groundwater posed a potential risk to future groundwater users.

And then in 2000, we did a supplemental sampling. We wanted to collect additional soil data for risk assessments, to actually evaluate the soil.

Site 10, as I mentioned, it was separated in two
operable units. One operable unit 5 was to address the
groundwater at Site 10, and operable unit 6 was to
address the soil at Site 10. Tonight, obviously, we're

talking about operable unit 6.

So, basically, subsequent to this Phase II RI, we collected additional soil data in the vicinity of the former TCE still, and we used this to assess potential risks, both human health and ecological. And this investigation of soil determined that there was no unacceptable risk to human health or ecological risks and that no action was necessary for Site 10 soil.

Just to go over Site 10 groundwater again, operable unit 5, the groundwater is being addressed in the record of decision that was signed in 2005 and groundwater treatment is in place, which involves sitewide groundwater extraction and treatment, and that water is then pumped to the treatment plant, which is located nearby Site 1.

So a Human Health Risk Assessment was conducted for the soil, evaluated current and future industrial workers, adolescent trespassers and

visitors, future adult and child residents who may live on the site, hypothetical scenario were very conservative, but we want to do that, out of future construction by the scenario. It indicated there was no unacceptable risk under current or future conditions and that no remedial action is necessary to be protective of human health.

Ecological risk assessment was also done, again the same species, upper-trophic-level and lower-trophic-level. This indicated that there was no unacceptable risk, and again, the results of the ERA, no remedial action is necessary to be protective of ecological health.

So you're asking, is there a risk for Site 10 soils? No, there's not. There's no unacceptable risk from exposure to soil to current or future ABL tenants, and there's no unacceptable risk from exposures to soil for future potential residents who may reside at the site.

Do we need to do anything further for the soil? No, we don't. As we allude to, it does not present an unacceptable risk to humans, plants, animals

1 under any land-use scenario and the soil does not 2 represent a source of groundwater contamination.

What are we proposing? The Navy, USEPA and
West Virginia Department of Environmental Protection
have determined the site does not pose an unacceptable
risk, and that is under -- for human health or the
environment under current or future land-use scenarios.

Community participation, again I've gone over this slide. It's part of the preferred alternative selection, and your comments are solicited here and will be incorporated in the record of decision.

The public comment period is the same for this document, July 24th through August 22nd. The public meeting is obviously tonight. Additional information on this site for Site 10 soil can be found in the PRAP, which is -- there are copies of them over there on the table, and also these documents are available at the admin. record repositories in LaVale and Fort Ashby.

Public comments tonight at the conclusion of this presentation, written by August 22nd, and either mailed to Robin Willis at the address there or e-mailed to Robin Willis, or you can even call Robin Willis and

- 1 tell her your comments over the phone. The admin.
- 2 record repositories, this library here, the Fort Ashby
- 3 | library in West Virginia.
- 4 Does anybody have any questions or comments on
- 5 | the PRAP for Site 10?
- 6 MR. DOWNS: Can you say a little bit more
- 7 about the groundwater? I mean the soil is fine, but
- 8 the groundwater is being remediated. Can you say
- 9 exactly what that means and what's the basis for
- 10 saying, we're done; we're not going to take any more
- 11 | water or soil? I mean, what's the end point and how's
- 12 | that attributed --
- MR. CALLAGHAN: Well --
- 14 MR. DOWN: -- to sites when that's done?
- 15 MR. CALLAGHAN: Okay. So let me start first
- 16 with the soil. The soil has been investigated. It's
- 17 not a source of contamination to groundwater, so
- 18 | there's no residual contamination there that's
- 19 | contributed to groundwater, and there's no risk from
- 20 exposure to soil at all.
- Now there is groundwater contamination at
- 22 | Site 10. There is TCE, generally a much larger plume

- 1 of about 5 micrograms per liter. Let me go to a -- let
- 2 | me go to a slide so I can allude to this a little bit
- 3 better.
- 4 Okay, here is Site 10 itself. This area
- 5 here, that is -- that is the extent of groundwater
- 6 contamination at 5 parts per billion.
- 7 MR. DOWNS: That circle is the plume?
- 8 MR. CALLAGHAN: That circle there is basically
- 9 the extent of the plume. Five parts per billion is the
- 10 drinking water standard for EPA, TCEs allowable in
- 11 public drinking water. So that's the extent of the
- 12 plume at Site 10.
- 13 There are -- it's a much higher level of
- 14 | contamination actually around Building 157 South.
- 15 believe the levels are 100, 150, something like that,
- 16 | so one order of magnitude larger than the drinking
- 17 | water standards actually surrounding the immediate
- 18 building.
- MR. DOWNS: So at the boundary of the plume,
- 20 you said it was five?
- 21 MR. CALLAGHAN: The boundary of the plume is
- 22 | five, yes. Now what is being done there, obviously

- 1 investigations were conducted at the site. Risk
- 2 assessments were conducted, very similar to this. A
- 3 proposed plan was held. A pubic meeting was held.
- 4 Comments were solicitated. The preferred alternative
- 5 | was determined to be continuation of the groundwater
- 6 extraction system.
- 7 The Navy actually put in an interim
- 8 groundwater extraction system. I'm not sure of the
- 9 actual date. I think it might have been 1997 they
- 10 actually started a pump and treat system to contain
- 11 | the groundwater and to extract it, and then they move
- 12 | it over to -- there is a treatment plant over here
- 13 that actually has an air stripper in it, and it strips
- 14 all the volatile organic compounds out of it.
- MR. DOWNS: So that's everything, TCE and any
- 16 other --
- 17 MR. CALLAGHAN: TCE is the --
- MR. DOWNS: I assume that TCE is the only
- 19 | thing that's really exceeding --
- MR. CALLAGHAN: There might be some associated
- 21 donor compounds like vinyl chloride in very small
- 22 levels, but that air stripper basically gets rid of all

Page 34

- 1 | the VOC contamination. So that's how it's treated,
- 2 so that plume itself is being maintained. The
- 3 groundwater's been extracted, and it's being treated
- 4 at another site. So that is what is being done at
- 5 | Site 10.
- 6 MS. KAGEY: What you have to understand is
- 7 | that there is a solvent disposal pit at Site -- is it
- 8 Site 1, where this treatment plant was built because
- 9 the soil was so contaminated that it continues to this
- 10 day to essentially contaminate the groundwater, and so
- 11 | the pump and treat station was built primarily for
- 12 that, and the levels were huge. I mean, there were
- 13 hundreds of thousands --
- MR. DOWNS: At Site 1?
- MS. KAGEY: At Site 1 and that was one of
- 16 | the --
- 17 MR. AUBERT: It's all along the river back
- 18 here. See all the little dots?
- 19 MS. KAGEY: Site 1 is along the river. Do you
- 20 | see all those little dots? I'm assuming those are your
- 21 sample wells?
- 22 MR. AUBERT: Those are all wells.

MR. CALLAGHAN: These are -- this line of wells here is the line of extraction wells.

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plant right there.

MR. KAGEY: And what they did was, early on, was they took samples all over the site to essentially determine the groundwater flow, but also to determine contaminants before it hit the river or went under the river and, essentially, that treatment plant was built for that site because Site 10 looks like a, you know, a kid compared to what was going on with --

MR. DOWNS: Okay, just trying to get educated here.

MS. KAGEY: That's essentially the background of why --

MR. DOWNS: And I'm number two public; I can say that.

MS. KAGEY: -- well, why they have a treatment

MR. CALLAGHAN: Okay. Are there any more comments on the Proposed Remedial Action Plan for Site 10 Soil?

MS. KAGEY: Can you just remind me what was in the soil? Are we looking at metals or organics or

- both?

 MR. CALLAGHAN: To be honest, I don't know.
- 4 MR. AUBERT: In the soil for risk assessment?

Okay.

5 MS. KAGEY: Both?

MS. KAGEY:

- 6 MR. AUBERT: Both.
- 7 MR. CALLAGHAN: But obviously, I'll go back
- 8 and --

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- 9 MS. KAGEY: I don't remember either, but
- 10 | that's okay. I can look it up.
- MR. CALLAGHAN: I will, I will --
- MR. MARTIN: Well, look at the -- jump up to
- 13 | the use of the site, because it's -- if you look at the
- 14 use or the source of the contamination, it'll suggest
- 15 | what we -- what was in there.
- 16 MS. KAGEY: It was a still, wasn't it?
- 17 MR. MARTIN: Yeah, it was a still, right.
- MR. AUBERT: Cleaned up the solvents that were
- 19 contaminated from, I think, greasing and things like
- 20 that.
- 21 MS. KAGEY: Right.
- MR. AUBERT: They reused the solid again.

1 MR. MARTIN: So they can still obviously have 2 TCE and any other contaminants that were in the 3 contaminated solvent. MR. BARBER: I think low levels of TCE and 4 5 probably metals were in the soil. 6 MS. KAGEY: But at one point we had talked 7 about background, trying to figure out the background 8 of the soil. I think that was another, earlier meeting 9 we had. 10 MR. CALLAGHAN: But honestly, I will go back and I will look at that in more detail, and I'll 11 12 present that in writing. 13 Are there any additional comments on the PRAP 14 for Site 10? Okay, with that, I will close the 15 presentation for Site 10 soil.

MR. MARTIN: Now, I have a comment. The RAB
was scheduled -- was it 7:30?

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MR. CALLAGHAN: It was presented in the public notice to immediately follow the proposed remedial --

MR. MARTIN: To immediately follow then?

MR. CALLAGHAN: To immediately following this meeting.

1	MR. MARTIN: Okay. Why don't we take just a			
2	few-minute break and reconvene on this table after we			
3	click the microphones; right? We don't we're not			
4	MR. CALLAGHAN: No, we don't need a court			
5	reporter for the RAP.			
6	MR. MARTIN: Right.			
7	MS. KAGEY: The RAP is Restoration Advisory			
8	Board. It's anybody who wants to come and essentially			
9	talk about what's going on next.			
10	(Whereupon the meeting was concluded at 7:10			
11	p.m.)			
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Appendix B
Public Comment Period and Public Meeting Notice

Region

FRIDAY, JULY 21, 2006 | CUMBERLAND TIMES-NEWS | www.times-news.com

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As well as food and beverages all day Winners will be notified if not in attendance.

TIME	PRIZE	TIME	PRIZE
3:15	\$200.00 CASH		.\$500.00 CASH
3:30	\$300.00 CASH	6:00\$	1,000.00 CASH
3:45	\$500.00 CASH	6:15	.\$200.00 CASH
4:00	\$1,000.00 CASH	6:30	.\$300,00 CASH
4:15	\$200.00 CASH	6:45	.\$500.00 CASH
4:30	\$300.00 CASH	7:005	1,000.00 CASH
4:45	\$500.00 CASH	7:15	\$200.00 CASH
5:00	\$1,000.00 CASH	7:30	\$300.00 CASH
5:15	\$200.00 CASH	7:45	\$500.00 CASH
5:30	\$300.00 CASH	8:00	5,000.00 CASH*

*\$:00 PM Grand Prize \$5,000.00 CASH will be awarded based on the evening Pick-3 Drawing of the Maryland Lottery for 8/5/06. \$100 Door Prize at 3:10, 4:10, 5:10, 6:10, & 7:10 You must be present to win door prizes and you will have 15 minutes to claim the door prize or it is forfeited. To purchase a ticket call Bishop Walsh School 301-724-5360 Contact BWAA: President John Cullen 301-463-6404 Vice President Troy Thomas 301-722-3822 Secretary: Betsy Geiger 301-724-0504 Also Available At Geatz' Restaurant & Joe's Viaduct

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PUBLIC COMMENT PERIOD and PUBLIC MEETING August 8, 2006

Allegany Ballistics Laboratory, Rocket Center, West Virginia

The Department of the Navy invites the public to comment on the Proposed Plans for Site 2, Site 3 and Site 10 Soil at Allegany Ballistics Laboratory (ABL). These documents were prepared as part of the Navy's Installation Restoration Program at ABL, in accordance with the requirements of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

PUBLIC MEETING

The Navy will hold a public meeting to provide information, answer questions, and receive comments on the Proposed Plans for Site 2, Site 3 and Site 10 Soil.

WHEN: Tuesday August 08, 2006 from 6:30 pm until 8:00 pm

WHERE: La Vale Public Library, 815 National Highway, La Vale, MD, 21502.

For more information, or if you need special assistance to attend the meeting, please contact Ms. Robin Willis, NAVFAC Mid-Atlantic, at the address below.

immediately following this meeting, the Restoration Advisory Board (RAB) will hold its regular meeting. The public is invited to stay for the RAB meeting. The RAB is looking for new members: people who would be interested in learning more about the Installation Restoration Program at ABL and providing feedback to the Navy. The RAB meets twice a year.

For more information, please visit our website http://public.lantops-ir.org/sites/public/ABL.

PUBLIC COMMENT PERIOD

The Proposed Plans describe the background and the Navy's reasons selecting the preferred action for each site. The public is encouraged to review and comment on the Proposed Plans. A final decision will be made after public comments are received. The preferred remedy may be modified, or another remedy may be selected, after public comments are considered.

Data and risk assessments, presented in a 2005 Final Risk Assessment Report, concluded that no further action is necessary to protect human health and the environment at Site 2, Site 3 and for soils at Site 10. Therefore, "No Further Action" is the Navy's preferred action at these sites.

The Proposed Plans for Site 2, Site 3 and Site 10 Soil, the 2005 Final Risk Assessment Report, as well as other documents about these sites, are available for public review at:

Fort Ashby Public Library P.O. Box 74 Lincoln Street Fort Ashby, WV 26719 Phone: 304-298-4493

La Vale Public Library 815 National Highway La Vale, MD 21502 Phone: 301-729-0855

Public comments will be accepted from July 24, 2006, to August 22, 2006. Please send your written comments (postmarked by August 22, 2006) to:

NAVFAC Mid-Atlantic 9742 Maryland Ave. Norfolk, Virginia 23511-3095 Attention: Public Affairs Officer (Ms. Robin Willis) Phone: (757) 445-8732 ext. 3096

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r. rmin Resinck, who rated Yates about three is after the June 2001 mings, said she knew ictions were illegal but 't know they were ig because she was tryto save the children going to hell.

f she did not intervene take their lives while were still innocent, would end up in hell," aid, testifying as a ise rebuttal witness. 3. Yates knew what she Joing was right for her

tes, 42, is being retried ise an appeals court urned her 2002 capital er conviction on the mile whether she should be released - although jurors are not allowed to know that

Her attorneys say she suffered from severe postpartum psychosis and meets Texas' definition of insanity: that a severe mental illness prevents someone who is committing a crime from knowing it is wrong.

Again on Wednesday, jurors saw a 14-minute videotape of Resnick's interview with Yates in jail on July 14, 2001. She answered questions about the drownings after listing her children's names and ages: Noah, 7; John, 5; Paul. 3; Luke, 2; and Mary, 6

Wnen Resnick whether she loved them, she responded, "Yes. Not in the right way, though."

Resnick, a psychiatry professor at Case Western Reserve University Cleveland, began testifying after the state rested its case Tuesday.

Under cross-examination. Resnick acknowledged that Yates' question during an interview with a jail psychiatrist the day after the drownings, "Are they in heaven?" could indicate doubts about what she had done. But Resnick said he thought she was questioning whether the children had arrived in heaven yet.

v.v. supreme court Ansiderei appears.

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For more information, please visit our website http://public.lantops-ir.org/sites/public/A

PUBLIC COMMENT PERIOD

The Proposed Plans describe the background and the Navy's reasons selecting the proferred action for each site. The public is encouraged to review and comment on the Proposed Plans. A final decision will be made after public comments are received. Tl preferred remedy may be modified, or another remedy may be selected, after public c ments are considered.

Data and risk assessments, presented in a 2005 Final Risk Assessment Report, conclu that no further action is necessary to protect human health and the environment at Sit Site 3 and for soils at Site 10. Therefore, "No Further Action" is the Navy's preferred action at these sites.

The Proposed Plans for Site 2, Site 3 and Site 10 Soil, the 2005 Final Risk Assessmen Report, as well as other documents about these sites, are available for public review a

> Fort Ashby Public Library P.O. Box 74 Lincoln Street Fort Ashby, WV 26719 Phone: 304-298-4493

La Vale Public Library 815 National Highway La Vale, MD 21502 Phone: 301-729-0855

Public comments will be accepted from July 24, 2006, to August 22, 2006. Please your written comments (postmarked by August 22, 2006) to:

> NAVFAC Mid-Atlantic 9742 Maryland Ave. Norfolk, Virginia 23511-3095 Attention: Public Affairs Officer (Ms. Robin Willis) Phone: (757) 445-8732 ext. 3096

Email: robin.a.willis@navy.mil

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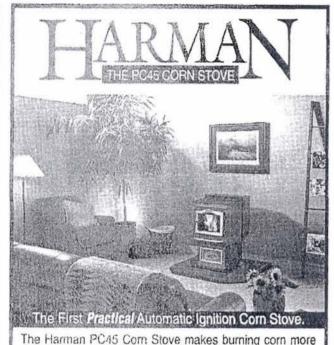
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